#### DOCUMENT RESUME

ED 325 161 JC 900 558

AUTHOR

McCoy, Kay R.

TITLE

Inferred Program Costs: Occupational Programs,

FY84-89. Research Brief RB90-12.

INSTITUTION

Prince George's Community Coll., Largo, MD. Office of

Institutional Research and Analysis.

PUB DATE

Jun 90

NOTE

14p.

PUB TYPE

Statistical Data (110) -- Reports -

Evaluative/Feasibility (142)

EDRS PRICE

MF01/PC01 Plus Postage.

DESCRIPTORS

Allied Health Occupations Education; Associate Degrees; Community Colleges; Cost Effectiveness;

\*Cost Estimates; Cost Indexes; Educational Certificates; \*Educational Finance; Evaluation Methods; \*Expanditure per Student; Longitudinal

Studies; \*Program Costs; Program Evaluation; Two Year

Colleges; \*Vocational Education

#### ABSTRACT

The Inferred Program Cost (IPC), a program evaluation indicator in use at Prince George's Community College (PGCC), represents the cost of one student completing the curriculum requirements for a degree or certificate program/option as specified in the cyrrent college catalog. The IFP for each program is the dollar amount representing the theoretical cost of producing one graduate based on the costs of instruction in a given fiscal year. This report examines the IPC's of all occupational programs at PGCC from Fiscal Year (FY) 1984 through FY89. Among the findings presented are the following: (1) the median IPC for associate in arts (AA) programs in FY89 was \$8,544, ranging from a low of \$6,151 for Microcomputer Systems to a high of \$18,042 for Respiratory Therapist; (2) the five allied health programs were the most costly AA options, while the three business/management programs were among the four least expensive; (3) the FY89 IPC's for certificate programs ranged from \$2,029 for the Marketing Management certificate tc \$5,561 for the Medical Secretary certificate; and (4) . Espiratory Therapist and Nuclear Medicine Technology programs showed the greatest IPC increase over the 5-year period (118% and 94%, respectively), while Criminal Justice Technology and Early Childhood Education showed the smallest IPC increases (11% and 13%, respectively). Detailed data tables are appended, presenting the IPC for all PGCC AA and certificate programs from FY 1984 through FY 1989. (JMC)

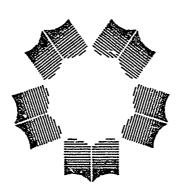
Reproductions supplied by EDRS are the best that can be made

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*



### **INFERRED PROGRAM COSTS**

**Occupational Programs, FY84-89** 



PRINCE GEORGE'S COMMUNITY COLLEGE

Research Brief RB90-12

Kay R. McCoy

U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating t

Minor changes have been made to improve reproduction mustify

1 reproduction quality

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) "

"PERMISSION TO REPRODUCE THIS

MATERIAL HAS BEEN GRANTED BY

K. R. McCoy

Office of Institutional Research and Analysis

June 1990



# INFERRED PROGRAM COST, FY84 - 89 Research Brief RB90-12 June 1990

#### Introduction

The Inferred Program Cost (IPC) is a program evaluation indicator which was developed as part of the Occupational Program Management System. The research office has been using this indicator in program evaluations for several years. This report will look at the IPCs of all occupational programs from FY84 through FY89.

#### TPC Definition and Calculation

The Inferred Program Cost is the cost of one student completing the curriculum requirements for a degree or certificate program/option as specified in the current College catalog. It represents the theoretical cost of producing one graduate based on the costs of instruction (using the Discipline Cost Analysis) in a given fiscal year.

The IPC is calculated by summing the products of the required hours in each discipline multiplied by the discipline cost per credit hour. This procedure is illustrated by the FY89 IPC for the Accounting A.A. degree program (costs as displayed are rounded):

#### Inferred Program Cost Accounting A.A. Program FY89

| Discipline             | Credit<br>Hours | Discipline Cost<br>per Credit Hour | Cost    |
|------------------------|-----------------|------------------------------------|---------|
| Accounting             | 27              | 83                                 | \$2,243 |
| English Composition    | 6               | 115                                | 690     |
| Accounting Electives   | 6               | 93                                 | 560     |
| Mathematics            | 6               | 92                                 | 551     |
| Business               | 6               | 83                                 | 496     |
| Science Elective       | 3               | 120                                | 360     |
| Physical Education     | 2               | 177                                | 353     |
| College Wide Electives | 3               | 107                                | 321     |
| Speech Communication   | 3               | 105                                | 315     |
| Econ/Pol.Science Elect | . 3             | 96                                 | 287     |
| Management             | 3               | 86                                 | 257     |
| Totals                 | 68              | IPC:                               | \$6,435 |



In cases where the curriculum offers a choice of courses, such as the requirement of an elective from a specified set of alternatives, the discipline cost per credit hour is calculated for that group of courses as a whole, then multiplied by the required hours.

#### A Look at FY89 Costs

To help assess the relative costliness of each program option, the IPC for each program option was divided by the median IPC for all occupational program options of the same level (A.A. or certificate) and multiplied b; 100. An index number above 100 indicates a program of above median cost; index numbers below 100 identify less expensive programs. The table below shows the IPCs and index numbers for A.A. program options in FY89, and the one on the next page shows the same information for the certificate options.

# Inferred Program Costs A.A. Program Options FY89

|                                    |                  | Index        |
|------------------------------------|------------------|--------------|
| Program Option                     | IPC              | (Median=100) |
| Respiratory Therapist              | \$18,042         | 211          |
| Nuclear Medicine Technology        | \$16,804         | 197          |
| Radiography                        | \$12,450         | 146          |
| Medical Records Technician         | \$10,198         | 119          |
| Nursing                            | \$10,007         |              |
| Word/Info Processing Supervisor    | \$9,866          |              |
| Medical Secretary                  | \$9,832          | 115          |
| Computer Service Technology        | \$9,681          | 113          |
| Electronics Engineering Technology | \$9,430          | 110          |
| Executive Secretary/Adm Asst       | \$8,852          | 104          |
| Hospitality Services Management    | \$8,847          | 104          |
| Legal Secretary                    | \$8,544          | 100          |
| General Drafting Technology        | \$8,014          | 94           |
| Early Childhood Management         | <b>\$7,185</b>   | 84           |
| Computer Prog & Analysis           | \$6 <b>,</b> 757 | 79           |
| Early Childhood Education          | \$6,696          | 78           |
| Computer Management                | 62ر ,\$6         |              |
| Accounting                         | \$6,435          |              |
| Criminal Justice Technology        | \$6,415          |              |
| Business Management                | \$6,243          |              |
| Para-legal/Legal Assistant         | <b>\$6,157</b>   |              |
| Marketing Management               | \$6,153          |              |
| Microcomputer Systems              | \$6,151          | 72           |



The median IPC for A.A. program options in FY89 was \$8,544. The IPCs ranged from a low of \$6,151 for Microcomputer Systems to a high of \$18,042 for Respiratory Therapist. The five allied health options topped the list with costs of Respiratory Therapist and Nuclear Medicine Technology approximately twice the median IPC. Radiograpy's IPC was 46 percent above the median. The least expensive A.A. program options included Microcomputer Systems and 3 business/management program options (in marketing, para-legal, and business management) - all under 75 percent of the median IPC.

The table below shows that the FY89 inferred costs of the certificate options ranged from \$2,029 for the Marketing Management Certificate to \$5,561 for the Medical Secretary Certificate. The Medical Secretary IPC was 38 percent above the median IPC for certificates (\$4,032). Other options costing more than 25 percent above the median IPC were the two electronics certificates. Three business/management certificate options (in marketing, small business, and accounting) had IPCs which were less than seventy percent of the median. The IPC of the marketing certificate was only half of the median IPC for certificates.

# Inferred Program Costs Certificate Program Options FY89

|                                      |                  | Index        |
|--------------------------------------|------------------|--------------|
| Program Option                       | IPC              | (Median=100) |
| Medical Secretary Certificate        | \$5,561          | 138          |
| Electronics Microprocessor Cert      | \$5,204          | 129          |
| Electronics Communications Cert      | \$5,123          | 127          |
| Medical Transcriptionist Cert        | \$4,899          | 122          |
| Word/Info Processing Supervisor Cert | \$4,804          | 119          |
| Legal Secretary Certificate          | \$4,515          | 112          |
| Food Service Management Certificate  | \$4,496          | 112          |
| Executive Secretary/Adm Asst Cert    | \$4,371          | 108          |
| Hotel Management Certificate         | \$4,273          | 106          |
| Architectural Drafting Certificate   | \$4,213          | 104          |
| Engineering Drafting Certificate     | \$3,850          | 95           |
| Computer Programming Certificate     | \$3,164          | 78           |
| Grhamental Horticulture Certificate  | \$3,090          | 77           |
| Criminal Justice Tech. Certificate   | \$3,071          | 76           |
| Early Childhood Education Cert       | \$2 <b>,</b> 887 | 72           |
| Para-Legal/Legal Assistant Cert      | \$2,853          | 71           |
| Microcomp Applications Certificate   | \$2,846          | 71           |
| Accounting Certificate               | \$2,743          | €8           |
| Small Business Mgt Cert.             | \$2,528          | 63           |
| Marketing Managemert Certificate     | \$2,029          | 50           |



#### FY84 - FY89 Trends

The IPCs were calculated for all occupational programs for FY84 through FY89 so that costs could be analyzed within each program option over the five year period. The program options which showed the largest increases in inferred program cost during those five years were:

#### Inferred Program Cost Frograms with the Largest Increases FY84 - FY86

| Respiratory Therapist            | 118% |
|----------------------------------|------|
| Nuclear Medicine Technology      | 94%  |
| Word/Info Processing Certificate | 73%  |
| Word/Info Processing Supervisor  | 71%  |
| Medical Secretary                | 67%  |

Programs which increased the least between FY84 and FY89 were:

# Inferred Program Cost Programs with the Smallest Increases FY84 - FY86

| Criminal Justice Technology      | 11% |
|----------------------------------|-----|
| Early Childhood Education        | 13% |
| Marketing Management Certificate | 14% |
| Para-Legal/Legal Assistant       | 148 |
| Computer Management              | 15% |

The median IPCs for the college's A.A. and certificate program options increased 43 and 42 percent respectively.

#### Summary

The Inferred Program Cost is a theoretical cost indicator used to track the cost of <u>programs</u> rather than disciplines or cost centers which are normally tracked within the college. Although the indicator itself may not represent actual costs, the inferred program cost can show the costs of programs in relation to other programs and in relation to costs in previous years. This report shows that the IPC is an effective program cost indicator in that it does differentiate between costs of various programs, largely reflecting the discipline costs of the "core" courses. The IPC indicator essentially confirms what has been inferred from the discipline cost figures about the ranging of program costs.

The IPCs indicate that the allied health, electronics, and word processing programs/options were the most expensive. Respiratory Therapist, Nuclear Medicine and the word processing



options also had the largest increases in cost over the rast five years.

The program options with the lowest IPCs included the microcomputer, marketing, para-legal, business management, and accounting (certificate) options. The options with the least increase in cost also fell into the business management and computer areas - the criminal justice, early childhood education, para-legal and computer management A.A. options and the marketing certificate each showed increases of not more than 15 percent.

The tables on the following pages show all the IPCs for all the program options offered at the college from FY84 through FY89.

Kay R. McCoy Supervisor Institutional Research



#### Inferred Program Costs, A.A. Programs

| Program Name                       | FY84            | FY85           | FY86     | FY87           | FY88     | FY89            | _    | FY89 INDEX<br>(MEDIAN=169) |
|------------------------------------|-----------------|----------------|----------|----------------|----------|-----------------|------|----------------------------|
| Respiratory Therapist              | \$8,276         | \$9,274        | \$8,404  | \$10,680       | \$14,461 | \$18,042        | 118% | 211                        |
| Nuclear Medicine Technology        | \$8,646         | \$11,092       | \$13,243 | \$13,562       | \$14,994 | \$16,804        | 94%  | 197                        |
| Radiography                        | •               | \$10,844       | \$10,363 | \$12,096       | •        | \$12,450        | 32%  | 146                        |
| Medical Records Technician         | \$6,829         | \$7,720        | \$7,486  | \$9,279        | \$10,013 | \$10,198        | 49%  | 119                        |
| Nursing                            | \$7,266         | \$8,481        | \$8,755  | \$9,356        | \$10,215 | \$10,007        | 38%  | 117                        |
| Word/Info Processing Supervisor    | \$5,783         | \$7,034        | \$7,538  | \$8,798        | \$8,293  | \$9,855         | 71%  | 115                        |
| Medical Secretary                  | \$5,878         | \$6,974        | \$7,341  | \$8,563        | \$8,958  | \$9,832         | 67%  | 115                        |
| Computer Service Technology        | *               | *              | \$8,667  | \$9,558        | \$9,798  | \$9,681         |      | 113                        |
| Electronics Engineering Technology | \$7,094         | \$8,075        | \$8,517  | \$9,371        | \$9,626  | \$9,430         | 33%  | 110                        |
| Executive Secretary/Adm Asst       | \$5,606         | \$6,446        | \$6,827  | \$7,494        | \$6,939  | \$8,852         | 58%  | 104                        |
| Hospitality Services Management    | \$6,356         | \$6,619        | \$7,098  | \$7,730        | \$7,732  | \$8,847         | 39%  | 104                        |
| Legal Secretary                    | \$5,716         | \$6,726        | \$7,172  | <b>\$8,210</b> | \$7,809  | \$8,544         | 49%  | 100                        |
| General Drafting Technology        | *               | *              | *        | \$7,856        | \$8,093  | \$8,014         | ••   | 94                         |
| Early Childhood Management         | *               | *              | *        | \$6,819        | \$5,569  | \$7,185         | •-   | 84                         |
| Computer Prog & Analysis           | \$5,265         | \$5,889        | \$6,240  | \$7,082        | \$6,990  | \$6,757         | 28%  | . 79                       |
| Early Childhood Education          | \$5,930         | \$6,457        | \$7,068  | \$7,590        | \$7,375  | \$6,696         | 13%  | 78                         |
| Computer Managament                | \$5,717         | \$6,336        | \$5,982  | \$6,647        | \$6,657  | \$6,562         | 15%  | 77                         |
| Accounting                         | \$5,129         | \$5,718        | \$5,851  | \$6,353        | \$6,706  | \$6,435         | 25%  | 75                         |
| Criminal Justice Technology        | \$5,801         | \$6,384        | \$6,170  | \$6,791        | \$6,564  | \$6,415         | 11%  | 75                         |
| Business Management                | \$5,171         | \$5,753        | \$5,912  | \$6,497        | \$5,217  | \$6,243         | 21%  | 73                         |
| Para-legal/Legal Assistant         | \$5,395         | \$6,005        | \$6,001  | \$6,537        | \$6,379  | \$6,157         | 14%  | 72                         |
| Harketing Management               | \$5,103         | \$5,625        | \$5,786  | \$6,284        | \$6,183  | \$6,153         | 21%  | 72                         |
| Microcomputer Systems              | *               | *              | *        | \$6,215        | \$6,499  | <b>\$</b> 6,151 | ••   | 72                         |
| Engineering Drafting               | \$7,168         | \$7,774        | \$7,603  | *              | *        | *               | ••   |                            |
| Correctional Services              | \$6,129         | \$7,271        | *        | *              | *        | *               | ••   | ••                         |
| Real Estate                        | \$4,897         | \$5,394        | \$5,494  | *              | *        | *               | •-   |                            |
| Electromechanical Design           | \$6,760         | \$7,237        | \$9,072  | *              | *        | **              | ••   | •-                         |
| Computer Science                   | \$5,572         | \$6,240        | *        | *              | *        | *               |      | •-                         |
| Securit, Management                | \$5,995         | \$6,946        | *        | *              | *        | *               |      |                            |
| Medical Laboratory Technician      | \$11,652        | \$12,916       | \$20,276 | \$17,637       | *        | *               |      |                            |
| Archicectural Drafting             | \$7,667         | \$7,446        | \$8,112  | *              | *        | *               |      |                            |
| Energy/Heating + Air Conditioning  | \$7,615         | \$8,163        | \$7,651  | *              | *        | *               |      |                            |
| General Secretary                  | \$5,753         | \$6,794        | \$7,278  | \$8,199        | \$7,587  | *               | ••   |                            |
| Civil Engineering Technology       | \$8,367         |                | *        | *              | *        | *               |      | ••                         |
| Dental Assistant                   | \$10,705        | \$26,117       | *        | *              | *        | *               | • •• |                            |
| College Hean                       | <b>\$</b> 6,732 | \$7,992        |          | \$8,620        | \$8,338  | \$8,927         |      |                            |
| College Median                     | \$5,995         | <b>*</b> 5,960 | \$7,341  | \$7,856        | \$7,659  | \$8,544         | 437  | 6                          |

<sup>\*</sup> Indicates program not offered or obsolete.



#### Inferred Program Costs, Certificate Programs

|                                      |         |                 |         |         |         |         | % Change | INDEX        |
|--------------------------------------|---------|-----------------|---------|---------|---------|---------|----------|--------------|
| PROGRAM NAME                         | FY84    | FY85            | FY86    | FY87    | FY88    | FY89    | FY84-89  | (MEDIAN=100) |
| Medical Secretary Certificate        | *       | *               | *       | *       | *       | \$5,561 | ••       | 138          |
| Electronics Microprocessor Cert      | \$3,238 | \$3,711         | \$4,296 | \$5,000 | \$4,690 | \$5,204 | 612      | 129          |
| Electronics Communications Cert      | \$3,345 | \$3,905         | \$4,474 | \$4,273 | \$4,694 | \$5,123 | 53%      | 127          |
| Medical Transcriptionist Cert        | *       | *               | *       | \$4,547 | \$4,654 | \$4,899 | ••       | 122          |
| Word/Info Processing Supervisor CRi  | \$2,776 | \$3,479         | \$3,798 | \$4,421 | \$.,083 | \$4,804 | 737      | 119          |
| Legal Secretary Certificate          | *       | *               | *       | *       | *       | \$4,515 | ••       | 112          |
| Food Service Management Certificate  | \$3,080 | \$3,188         | \$3,379 | \$3,959 | \$3,794 | \$4,496 | 467      | <b>(</b> 112 |
| Executive Secretary/Adm Asst CRT     | *       | *               | *       | *       | *       | \$4,371 | ••       | 108          |
| Hotel Hanagement Certificate         | \$2,886 | \$2,952         | \$3,136 | \$3,514 | \$3,535 | \$4,273 | 487      | <b>4</b> 106 |
| Architectural Drafting Certificate   | \$3,512 | \$3,260         | \$3,632 | \$4,014 | \$4,213 | \$4,213 | 207      | <b>4</b> 104 |
| Engineering Drafting Certificate     | \$3,126 | \$3,301         | \$3,867 | \$3,712 | \$3,865 | \$3,850 | 237      | <b>4</b> 95  |
| Computer Programming Certificate     | \$2,333 | \$2,676         | \$2,737 | \$3,217 | \$3,270 | \$3,164 | 369      | ζ 78         |
| Ornamental Horticulture Certificate  | *       | *               | *       | *       | \$2,172 | \$3,090 |          | 77           |
| reiginal Justice Tech. Certificate   | *       | *               | *       | *       | *       | \$3,071 |          | 76           |
| Early Childhood Education Cert       | \$2,469 | \$2,624         | \$3,142 | \$1,511 | \$3,389 | \$2,887 | 177      | % <b>7</b> 2 |
| Para-Legal,'Legal Assistant Cert     | \$2,422 | \$2,726         | \$2,735 | \$3,039 | \$2,928 | \$2,853 | 185      | % 71         |
| Microcomp Applications Certificate   | *       | *               | *       | \$3,020 | \$3,052 | \$2,846 |          | 71           |
| Accounting Certificate               | \$2,279 | \$2,512         | \$2,564 | \$2,821 | \$2,905 | \$2,743 | 20       | <b>%</b> 68  |
| Small Business Mgt Cert.             | *       | *               | \$1,810 | \$2,921 | \$2,973 | \$2,528 |          | 63           |
| Marketing Management Certificate     | \$1,777 | \$1,936         | \$1,985 | \$2,170 | \$2,180 | \$2,029 | 145      | <b>%</b> 50  |
| Security Management Certificate      | \$2,758 | \$3,325         | *       | *       | *       | •       | ••       |              |
| Residential Construction Certificate | \$3,703 | *               | *       | *       | *       | 1       | ••       |              |
| Real Estate Certificate              | \$1,290 | \$1,406         | \$1,405 | *       | *       | *       |          | ••           |
| Computer Operations Certificate      | \$2,074 | \$2,339         | *       | *       | *       | *       | ••       | ••           |
| Secretarial Certificate              | \$2,911 | <b>\$</b> 3,518 | \$3,929 | \$4,430 | \$4,182 | •       | ••       | ••           |
| Clerk-Typist Certificate             | \$2,994 | \$3,404         | \$3,521 | \$3 865 | \$3,710 | •       |          | •-           |
|                                      |         |                 |         |         |         |         |          |              |
| College Hean                         | \$2,554 | \$2,756         | \$2,931 | \$3,445 | \$3,366 | \$3,826 | 5 50     | ×            |
| College Median                       | \$2,831 | \$3,188         | \$3,260 | \$3,712 | \$3,622 | \$4,032 | 2 42     | *            |

<sup>\*</sup> Indicates program not offered or obsolete.



#### Inferred Program Costs FY84 - FY89

|           |  |                 |                 |         |         |                    |                    | % Change | FY89 INDEX   |
|-----------|--|-----------------|-----------------|---------|---------|--------------------|--------------------|----------|--------------|
| Hegis #   | PROGRAM NAME                           | FY84            | FY85            | FY86    | FY87    | FY88               | FY89               | FY84-89  | (Median=100) |
|           |  |                 |                 |         |         |                    |                    |          |              |
|           |  |                 |                 |         |         |                    |                    |          |              |
| E001-01 E | BUSINESS MANAGEMENT                    |                 |                 |         |         |                    |                    |          |              |
| ם וטיוטטכ | DUSINESS MANAGEMENT                    |                 |                 |         |         |                    |                    |          |              |
| •         | Business Management                    | \$5,171         | \$5,753         | \$5,912 | \$6,497 | \$5,217            | \$6,243            | 21%      | 73           |
|           | Small Business Mgt Cert.               | *               | *               | \$1,810 | \$2,921 | \$2,973            | \$2,528            | ••       | 63           |
| •         |  |                 |                 |         |         |                    |                    |          |              |
| 5002-01   | ACCOUNTING                             |                 |                 |         |         |                    |                    |          |              |
|           | Accounting                             | \$5,129         | \$5,718         | \$5,851 | \$6,353 | \$6,706            | \$6,435            | 25%      | 75           |
|           | Accounting Certificate                 | \$2,279         | \$2,512         | \$2,564 | \$2,821 | ¥2,905             | \$2,743            | 20%      | 68           |
|           | ·                                      |                 |                 |         |         |                    |                    |          |              |
| 5004-06   | REAL ESTATE                            | •               |                 |         |         |                    |                    |          |              |
|           | Deal Sanan                             | \$4,897         | \$5,394         | \$5,494 | *       | *                  | *                  |          | ••           |
|           | Real Estate<br>Real Estate Certificate | \$1,290         | \$1,406         | \$1,405 | *       | *                  | *                  | ••       |              |
|           | Real Estate certificate                | 41,270          | 01,400          | .,      |         |                    |                    |          |              |
| 5004-08   | MARKETING MANAGFMENT                   |                 |                 |         |         |                    |                    |          |              |
|           |  |                 | AF 48F          | NE 70/  | e( 20/  | e4 107             | e4 157             | 21%      | 72           |
|           | Marketing Management                   | \$5,103         | \$5,625         | \$5,786 | \$6,284 | \$6,183<br>\$2,180 | \$6,153<br>\$2,029 | 14%      | _            |
|           | Marketing Management Certificate       | \$1,777         | \$1,936         | \$1,985 | \$2,170 | \$2,100            | \$2,029            | 147      | , ,          |
| 5005-01   | OFFICE ADMINISTRATION                  |                 |                 |         |         |                    |                    |          |              |
|           |  |                 |                 |         |         |                    |                    |          |              |
|           | Word/Info Processing Supervisor        | \$5,783         | \$7,034         | \$7,538 | \$8,798 | \$8,293            | \$9,866            |          |              |
|           | Medical Secretary                      | \$5,878         | \$6,974         | \$7,341 | \$8 563 | \$8,958            | \$9,832            |          |              |
|           | Executive Secretarial Adm Assistant    | \$5,606         | \$6,446         | \$6,827 | \$7,494 | \$6,939            | \$8,852            |          |              |
|           | Legal Secretary                        | \$5,716         | <b>\$</b> 6,726 | \$7,172 | \$8,210 | \$7,809            | <b>\$</b> 8,544    |          |              |
|           | Hedical Secretarial Certificate        | *               | *               | *       | *       | *                  | \$5,561            |          | 138          |
|           | Word/Info Processing Certificate       | \$2,776         | \$3,479         | \$3,798 | \$4,421 | \$4,083            | \$4,804            |          |              |
|           | egal Secretarial Certificate           | *               | *               | *       | * .     | *                  | \$4,515            |          | 112          |
|           | Executive Secretarial/Adm.Asst. Cert   | *               | *               | *       | è       | *                  | \$4,371            |          | 108          |
| •         | Secretarial Certificate                | \$2,911         | \$3,518         | \$3,929 | \$4,430 | \$4,182            | *                  |          |              |
|           | Clerk-Typist Certificate               | \$2,994         | \$3,404         | \$3,521 | \$3,865 | \$3,710            | *                  | ••       | ••           |
| •         | General Secretary                      | <b>\$</b> 5,753 | \$6,794         | \$7,278 | \$8,199 | \$7,587            | *                  | •••      | ••           |
| 5010-01   | HOSPITALITY SERVICES                   |                 |                 |         |         |                    |                    |          |              |
|           | Hospitality Services Management        | \$6,356         | \$6,619         | \$7,098 | \$7,730 | \$7,752            | \$8,847            | 399      | 6 104        |
|           | Food Service Hanagement Certificate    | \$3,080         |                 | \$3,379 | \$3,959 | \$3,794            | \$4,496            |          |              |
|           | Hotel Management Certificate           | \$2,886         |                 | \$3,136 | \$3,514 | \$3,535            | \$4,273            |          |              |
|           | notet management certificate           | JE,000          | 42,772          | , 150   | 15 .4   | ,                  | ,                  |          | -            |



#### Inferred Program Costs FY84 - FY89

| Hegis # | PROGRAM NAME   | FY84           | FY85    | FY86            | FY87    | FY88    | FY89    |     | FY89 INDEX<br>(Median=100) |
|---------|--|----------------|---------|-----------------|---------|---------|---------|-----|----------------------------|
| 5101-01 | COMPUTER/DATA PROCESSING                               |                |         |                 |         |         |         |     |                            |
| •       | Computer Prog & Analysis                               | \$5,265        | \$5,889 | \$6,240         | \$7,082 | \$6,990 | \$6,757 | 28% | 79                         |
|         | Computer Hanagement                                    | \$5,717        | \$6,336 | \$5,982         | \$6,647 | \$6,657 | \$6,562 | 15% | 77                         |
| •       | Computer Science                                       | \$5,572        | \$6,240 | *               | *       | *       | *       |     | ••                         |
| 5103-01 | COMPUTER PROGRAMMING  Computer Programming Certificate | <b>\$2,333</b> | \$2,676 | <b>\$</b> 2,737 | \$3,217 | \$3,270 | \$3,164 | 36% | 78                         |
| 5104-01 | COMPUTER OPERATIONS                                    |                |         |                 |         |         |         |     |                            |
|         | Computer Operations Certificate                        | \$2,074        | \$2,339 | *               | *       | *       | *       | ••  | ••                         |
| 5105-01 | COMPUTER SERVICE TECH                                  | *              | *       | \$8,667         | \$9,558 | \$9,798 | \$9,681 |     | 113                        |
| 5199-92 | HILROCOMPUTER SYSTEMS                                  |                |         |                 |         |         |         |     |                            |
|         | Microcomputer Systems                                  | *              | *       | *               | \$6,213 | \$6,499 | \$6,151 | ••  | 72                         |
|         | Microcomp Applications Certificate                     | *              | *       | *               | \$3,020 | \$3,052 | \$2,846 | ••  | 71                         |



#### Inferred Program Costs FY84 - FY89

| Hegis # PROGRAM NAME  | FY84             | FY85             | FY86            | FY87               | FY88     | FY89                 |      | FY89 INDEX<br>(Median=100) |
|---|------------------|------------------|-----------------|--------------------|----------|----------------------|------|----------------------------|
| 5202-U1 DENTAL ASSISTANT                                    | \$10,705         | <b>\$</b> 26,117 | *               | *                  | *        | *                    | ••   | ••                         |
| 5205-01 MEDICAL LABORATORY TECHNICIAN                       | \$11,652         | \$12,916         | \$20,276        | \$17,637           | *        | *                    |      | ••                         |
| 5207-01 RADIOGRAPHY   | \$9,437          | \$10,844         | \$10,363        | \$12,096           | \$11,453 | \$12,450             | 32%  | 146                        |
| 5208-01 NURSING   | \$7,266          | \$8,481          | \$8,755         | \$9,656            | \$10,215 | \$10,637             | 38%  | 117                        |
| 5213-01 MEDICAL RÉCORDS TECHNICIAN                          |                  |                  |                 |                    |          |                      |      |                            |
| Hedical Records Technician<br>Hedica: Transcriptionist Cert | \$6,829<br>*     | \$7,720<br>*     | \$7,486<br>*    | \$9,279<br>\$4,547 |          | \$10, 198<br>\$4,899 | 49%  | 119<br>122                 |
| 5215-01 RESPIRATORY THERAPIST                               | \$8, <i>2</i> 76 | <b>\$9,</b> 274  | \$8,404         | \$10,680           | \$14,461 | \$18,042             | 118% | 211                        |
| 5299-02 NUCLEAR MEDICINE TECHNOLOGY                         | \$8,546          | \$11,092         | <b>~</b> 13,243 | \$13,562           | \$14,994 | \$16,804             | 94%  | 197                        |



#### Inferred Program Costs FY84 - FY89

| Hegis #   | PROGRAM NAME                        | FY84    | FY85    | FY86    | FY87    | FY88    | FY89    | _     | FY89 INDEX<br>(Median=100) |
|-----------|-------------------------------------|---------|---------|---------|---------|---------|---------|-------|----------------------------|
| 5301-01 M | ECHANICAL ENGINEERING TECHNOLOGY    |         |         |         |         |         |         |       |                            |
|           | Electromechanical Design            | \$6,760 | \$7,237 | \$8,072 | *       | *       | *       |       | ••                         |
|           | Energy/Heating + Air Conditioning   | \$7,615 | \$8,163 | \$7,651 | *       | *       | *       |       |                            |
| •         |                                     |         |         |         |         |         |         |       |                            |
| 5303-01 D | RAFTING TECHNOLOGY                  |         |         |         |         |         |         |       | •                          |
|           | General Drafting Technology         | *       | *       | *       | \$7,856 | \$8,093 | \$8,014 | ••    | 94                         |
|           | Architectural Drafting Certificate  | \$3,512 | \$3,260 | \$3,632 | \$4,014 | \$4,213 | \$4,213 | 20%   | 104                        |
|           | Engineering Drafting Certificate    | \$3,126 | \$3,301 | \$3,867 | \$3,712 | \$3,865 | \$3,850 | . 23% | 95                         |
|           | Architectural Drafting              | \$7,667 | \$7,446 | \$8,112 | *       | *       | *       |       |                            |
|           | Engineering Drafting                | \$7,168 | \$7,774 | \$7,603 | *       | *       | *       |       |                            |
| 5309-01 ( | CIVIL ENGINEERING TECHNOLOGY        | \$8,367 | *       | *       | *       | *       | *       | ••    |                            |
| 5310-01 E | ELECTRONICS ENGINEERING TECHNOLOGY  |         |         | -       |         |         |         |       |                            |
|           | Electronics Engineering Technology  | \$7,094 | \$8,075 | \$8,517 | \$9,371 | \$9,626 | \$9,430 | 33%   | 110                        |
|           | Electronics Microprocessor Cert     | \$3,238 | \$3,711 | \$4,296 | \$5,000 | \$4,690 | \$5,204 | 61%   | 129                        |
|           | Electronics Communications Cert     | \$3,345 | \$3,905 |         | \$4,273 | \$4,694 | \$5,123 | 53%   | 127                        |
| 5317 úi f | RESIDENTIAL CONSTRUCTION CERTIF JA. | \$3,703 | *       | *       | *       | *       | *       |       |                            |
| 5402-01   | AGRICULTURAL TECHNOLOGIES           |         |         |         |         |         |         |       |                            |
| 4 (       | Ornamental Horticulture Certificate | *       | *       | *       | *       | \$2,172 | \$3,090 |       | 77                         |



#### Inferred Program Costs FY84 - FY89

| Hegis #   | PROGRAM NAME   | FY84               | FY85               | FY86               | FY87               | FY88               | FY89               | % Change<br>FY84-89 | FY89 INDEX<br>(Median=100) |
|-----------|--|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|----------------------------|
| 5503-03 0 | CHILD CARE TECHNOLOGIES                                  |                    |                    |                    |                    |                    |                    |                     |                            |
|           | Farly Childhood Education Early Childhood Education Cert | \$5,930<br>\$2,469 | \$6,457<br>\$2,624 | \$7,068<br>\$3,142 | \$7,590<br>\$3,511 | \$7,375<br>\$3,389 | \$6,696<br>\$2,887 | 13%<br>17%          | 78<br>72                   |
| 5503-d∑ £ | EARLY CHILDHOOD MANAGEMENT                               | *                  | *                  | *                  | \$6,819            | \$5,569            | \$7,185            |                     | 84                         |
| 5505-01 ( | CRIMINAL JUSTICE   | •                  |                    |                    |                    |                    |                    |                     |                            |
|           | Criminal Justice Technology                              | \$5,801            | \$6,384            | \$6,170            | \$6,791            | \$6,564            | \$6,415            |                     |                            |
|           | Criminal Justice Tech. Certificate                       | *                  | *                  | *                  | *                  | *                  | \$3,071            |                     | 7.5                        |
|           | Correctional Services                                    | \$6,129            |                    |                    | *                  | *                  | *                  |                     | ••                         |
|           | Security Management                                      | \$5,995            | \$6,946            | *                  | *                  |                    |                    |                     |                            |
|           | Security Management Certificate                          | \$2,758            | \$3,325            | *                  | -                  | -                  | -                  |                     |                            |
| 5599-01   | PARA-LEGAL/LEGAL ASSISTANT                               |                    |                    |                    |                    |                    |                    |                     |                            |
|           | Para-legal/Legal Assistant                               | \$5,395            | \$6,005            | \$6,001            | \$6,537            | \$6,379            | \$6,157            | 14%                 | . 72                       |
|           | Para-legal/Legal Assistant Cert                          | \$2,422            | \$2,726            | \$2,735            | \$3,039            | \$2,928            | \$2,853            |                     |                            |
|           | raid tolatheaght vasiatain ocit                          | , ·                | ,                  | ,                  | •                  | •                  | -                  |                     |                            |



KARAMANAN KARAMANAN KARAMANAN PARAMANAN PARAMA ERIC Clearinghouse for Junior Colleges

#### END

U.S. Dept. of Education

Office of Education Research and Improvement (OERI)

ERIC

Date Filmed

March 23, 1991

